

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

The mission of the Department of Toxic Substances Control is to provide the highest level of safety, and to protect public health and the environment from toxic barm.





Fact Sheet, August 2008

Methane Monitoring Program at Laguna Nueva School

We invite you to review and comment on the Draft Removal Action Work Plan (Plan) submitted by the Montebello Unified School District (District). The Plan described a program to monitor the levels of methane below the Extended Borrow Pit (EBP) area of the Laguna Nueva School (LNS) located at 6360 South Garfield Avenue, Commerce, California. Historically, EBP, in the northwestern section of the school property, was used as a landfill.

This Fact Sheet provides a brief summary of:

- Why Monitoring Is Necessary
- Site History & Background
- Site Investigation and Results
- Source of Detected Methane
- Proposed Remedial Options
- Safety during Monitoring Program
- California Environmental Quality Act Notice of Exemption
- Next Steps
- Where to Find the Documents and
- Who to Contact for Information

Why Monitoring is Necessary

While exposure to methane does not pose a direct health risk to children or staff, it is a potential explosive hazard at elevated concentrations within enclosed structures. Methane can accumulate in enclosed spaces, and if collected in sufficient concentration over time under building slabs or in utility lines, it may become an explosive hazard.

PUBLIC COMMENT PERIOD AUGUST 11 – TO SEPTEMBER 10, 2008

The Draft Plan for this school site and other related project documents are available for review and public comment at the locations listed on page 3. Please submit your written comments in the enclosed postage paid envelope postmarked by **September 10, 2008**. Or, e-mail before the deadline date no later than 5 p.m. to: Angela Ortega, DTSC Project Manager, 5796 Corporate Avenue, Cypress, CA 90630 or email: aortega@dtsc.ca.gov

OPEN HOUSE (5:00 to 6:00) & COMMUNITY MEETING: 6:15 p.m. August 27, 2008

You are invited to attend an **Open house & Community meeting** on August 27, 2008 at Laguna Nueva School, 6360 South Garfield Avenue, City of Commerce, California.

Spanish translation will be provided.

Although no methane has been detected over the past five years in the crawl spaces beneath the portable classrooms and office buildings, concentrations of methane exceeding DTSC's action level (5,000 parts per million by volume [ppmv]) have been detected in the soil vapor beneath the EBP between 5 and 40 feet.

DTSC recommended that the District develop a plan to monitor the levels of methane beneath the EBP and install methane detection alarms and exhaust fan(s) in the crawl spaces beneath select portable classrooms and/or office buildings, to ensure that any methane concentrations exceeding the methane action level established by DTSC will be quickly addressed. DTSC will oversee the mitigation and monitoring activities and ensure that it is performed in a manner that does not harm people or the environment.

Site Location and History

The Montebello Unified School District (District) submitted the Plan to Department of Toxic Substance Control (DTSC) for review and approval. The school property is approximately 14.7 acres located on the northeast corner of Gage and Garfield Avenue. School buildings occupy the northeastern 6.3 acres and the remaining southern 8.4 acres are vacant land. The EBP area occupies approximately 2.7 acres located in the northwest section.

A borrow pit was created in 1938 when fill dirt was removed from the northwest section of the school to provide fill soil for an offsite location. The borrow pit, EBP area, operated as a permitted Los Angeles County Class III rubbish dump from 1943 to approximately 1954 and accepted rubbish consisting of non-hazardous debris. In 1986, approximately 100,000 cubic yards of construction debris was removed from the former borrow pit and disposed of at the BKK Landfill in West Covina, California. After the material was raked to remove solid debris, the soil was reused as compacted fill in the pit left by the removal. The District acquired the property in 1987 through eminent domain and in 1992 constructed the school on approximately 6.3 acres.

In 1999 year, the District considered plans to expand the school into a larger elementary school, middle school and adult education center.

However, in 2006 and 2007 year, the District evaluated trends in new student enrollment and elected not to pursue expansion. DTSC concurred with the District's plan to continue operations in its current set up provided a plan to address methane is implemented to maintain safety and protect current occupants.

Site Investigation and Results

Earlier environmental investigations in 2001 and 2002 revealed high levels of metals, petroleum hydrocarbons and subsurface gas (methane and low levels of volatile organic compounds) in the EBP between 5 and 40 feet below ground surface.

Based on investigation results, DTSC required a methane monitoring program as an interim measure and preparation of a feasibility study to evaluate remedial alternatives and identify long term remedy. The monitoring program has been ongoing since 2002. The Feasibility Study conducted and approved in 2005 recommended remedial alternative which includes maintaining current use of EBP area for school facilities, institutional controls (monitoring methane), and long term operation and maintenance program.

Source of Detected Contaminants

The reuse of the fill material appears to have resulted in environmental contamination in the soil, including chrominium, benzo(a)pyrene and volatile organic compounds. Methane in the EBP area is from the decomposition of organic materials within the fill. Gases from the decomposition include carbon dioxide, methane, and traces of VOCs.

As a result of the historical activities at the school, residual metals and chemicals remain in the EBP soils.

Proposed Remedial Options

The Plan, prepared in June 2007, identifies and screens possible remedial action alternatives based on effectiveness, implementability and cost. Remedial action alternatives considered for this Site are as follows:

Alternative 1: No Action

Alternative 2: Deed Restriction,

Impervious (solid) Cover Over Existing Soil Cap, and Continued Methane Monitoring Via Existing Methane Detectors

Alternative 3: Deed Restriction,

Impervious Cover Over Existing Soil Cap, and Installation of an Advanced Methane Protection System

Alternative 4: Deed Restriction,

Impervious Cover Over Soil cap, Installation of Active Soil Gas Venting

System

Alternative 5: Source Removal

DTSC recommends Alternative 3: Deed Restriction, Impervious Cover Over Existing Soil Cap, and Installation of an Advanced Methane Protection System. This remedy was selected because it will address the potential for methane accumulation beneath and intrusion into the school buildings in a way that will 1) satisfy the applicable federal, state and local laws and regulations; 2) limit impact to on-going school activities; and 3) cost less than the other methods of methane mitigation and equally satisfy the two previous conditions.

If alternative 3 is selected, the construction of the integrated system will be installed by qualified technicians, experienced in the operation and programming of methane mitigation systems, licensed in California to perform electrical installations. The system is manufactured for the purpose of detection of explosive gas.

The system consists of three sensors, one placed under each of three buildings at the Site. The sensors will be connected to an exhaust fan (or fans, depending on the size of the crawl space) capable of achieving three air exchanges per hour within the building. In the event that methane gas should accumulate under the buildings as a result of seepage from the ground, the system will alert the site personnel responsible for periodic monitoring and provide real-time methane measurements 24 hours per day, seven days per week. As part of this option, a groundwater quality protective cover will also be installed. This system would consist of a solid

layer of asphalt over areas of the EBP not currently landscaped. This cover would serve to greatly reduce the amount of rainwater/irrigation water seeping through the EBP soil and into the groundwater.

Safety during Monitoring Program

The draft Plan includes a Site Specific Health and Safety Plan (HASP) with engineering control and monitoring measures to minimize potential exposures and risks to workers and the public during the proposed mitigation and monitoring activities. Details of the HASP are found in Appendix D of the draft Plan.

Notice of Exemption (NOE)

DTSC has prepared a draft Notice of Exemption (NOE) for this project as required by the California Environmental Quality Act (CEQA). The NOE document states that the project will not have a negative effect on the environment due to the nature of the mitigation system. This exemption allows for minor removal actions to be taken to manage areas impacted by potentially hazardous substances. The NOE will be finalized following the public comment period.

What Happens Next?

At the end of the Public Comment Period, DTSC will review, consider any public comments and make any necessary revisions to the draft Plan prior to final approval. Also, a Response to Comments Document will be mailed to any who makes a comment and provides their name and address. When the Plan is approved, mitigation and monitoring will start as described in the Plan.

Where to Find the Documents

The Draft Plan and other related documents for the proposed Laguna Nueva School are available for review at the following locations:

Laguna Nueva School 6360 S. Garfield Avenue Commerce, California 90040 (562) 806-7812 Monday-Friday 8 a.m.-2 p.m. City of Commerce Central Library 5655 Jillson Street Commerce, California 90040 (323) 772-6660 Tuesday-Thursday 10 a.m.-7 p.m. Friday 10 a.m.-6 p.m. Saturday 10 a.m.-5 p.m.

DTSC Regional Records Room 5796 Corporate Avenue Cypress, CA 90630 (714) 484-5337 call Ms. Julie Johnson for appointment Monday–Friday 8 a.m.-5 p.m.

For More Information

If you have any questions about this Fact Sheet or the Draft Plan, please contact us at:

Angela Ortega
DTSC Project Manager:
(714) 484-5468 or aortega@dtsc.ca.gov

Maya Akula
DTSC Public Participation Specialist
(818) 717-6566 or makula@dtsc.ca.gov
Toll Free: 1-866-495-5651, press 3 then 1

Media Inquiries:

Jeanne Garcia, DTSC Public Information Officer (818) 717-6573 or email: jgarcia1@dtsc.ca.gov

Notice to Hearing-Impaired Individuals

You can obtain additional information by using the California State Relay Service at: 1 (888) 877-5378 (TDD). Ask them to contact Maya Akula at (818) 717-6566 regarding the Laguna Nueva School project.

Meeting Accessibility

For information on accessibility and to request reasonable accommodation, please call Ms. Maya Akula at (818) 717-6566 at least one week in advance of the Community Meeting.

DTSC is part of the California Environmental Protection Agency. DTSC oversees soil and groundwater investigation at proposed new or expanding school sites, and evaluates property for potential hazardous materials or contamination that may pose a risk to school children, the staff or faculty. If contamination is found DTSC oversees the cleanup of the property in accordance with state and federal laws and regulations.

For more information about DTSC, please visit our Web site at: www.envirostor.dtsc.ca.gov/public

LOCATION MAP 6360 South Garfield Avenue, Commerce, California

